Amendments to the Drawings:

Replacement sheets for FIGS. 1-3 are enclosed which formalize the drawings that were submitted with the application. No other changes have been made. Formal drawings are submitted herewith under separate Letter to the Official Draftsperson. Approval by the Examiner is respectfully requested.

REMARKS

Formal drawings are submitted herewith under separate Letter to the Official Draftsperson. No other changes have been made.

Currently claims 1-27 are pending in the application. Claims 1-27 have been rejected

By this amendment, independent claims 1 and 16, as well as dependent claims 10-15 and 24-27, have been amended to specify that the image enhancement algorithm is automatic. The use of the term "automatic" means that no manual or user intervention is required for the application of the image enhancement algorithm. All of the examples of the image enhancement algorithms given in the specification (e.g., adaptive tone scale enhancement algorithm, color enhancement algorithm, noise reduction algorithm and sharpening algorithm) have no user intervention. It is clear that one skilled in the art would understand that the present invention operates without user intervention.

Claims 1 and 16 are the only independent claims in this case. Claim 1 is representative. The problem that claim 1 solves is that often input digital images are represented in different input color spaces. It is difficult to have a single image enhancement algorithm effectively operate on all of the different color spaces. In claim 1, the input color space of the input digital image is identified, and a color space transformation is applied to form a corresponding input digital image in a reference color space. Even though the input images are now in a common reference color space, they will still have different characteristics depending on the original input color space. As a result, the application of a given image enhancement algorithm can produce unsatisfactory results if it is applied in the same way to the corresponding input images in the reference color space. It is an important feature of the present invention, found in step c) of claim 1, that algorithm parameters of the automatic image enhancement algorithm are adjusted in response to the identified input color space. It has been found that by using this technique, the problems noted above can be reduced. In step d) the adjusted automatic image enhancement algorithm is applied to the corresponding input digital image in the reference color space.

Claims 1-4, 6-19 and 21-27 were rejected under 35 U.S.C. § 102(b) as being anticipated by Gruzdev et al. (US Pub. No. 2003/0002095).

Gruzdev et al. disclose a system for manually adjusting the color of an image. In paragraph [0020] of Gruzdev et al., input images may be represented

by different color spaces. The method of Gruzdev et al. relies on having the image in a color space with appropriate lightness, hue and chroma attributes. Therefore, if the input image is not in an appropriate color space, they will apply a color transform to get it into such a color space [0026]. A series of user-specified adjustments are then applied to the image to provide a modified image. The adjustments may include lightness, hue and chorma adjustments, but in each case the adjustments are user-specified, and are not determined by applying an automatic algorithm to automatically determine the adjustments based on the image content. Furthermore, the adjustments that they make are a function of the user's preferences, and the characteristics of the reference color space where the adjustments are applied. But they are not, as required by claim 1, a function of the original input color space. Both of these differences are significant. There is no motivation in Gruzdev et al. for applying an automatic enhancement algorithm having parameters that are adjusted as a function of the original input color space. The adjustements in Gruzdev et al. are all user-specified manual adjustements, and there is no mention or reason suggested by Gruzdev et al. to make different adjustments as a function of the original color space of the input digital image. Claims 1 and 16 are believed to contain unobvious subject matter, and are believed to be allowable.

The remaining dependent claims all make use of the features described in independent claims 1 or 16, and should also be allowable along with them.
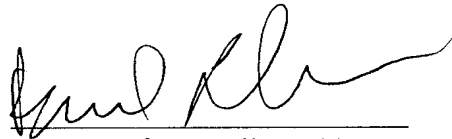
Claims 5 and 20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Gruzdev et al. (US Pub. No. 2003/0002095) in view of Capitant et al. (US Pat. No. 5,321,500).

Gruzdev et al. has been discussed above. Capitant et al. does a reverse sensitometry function, but does not disclose, suggest or provide any motivation for the automatic enhancement algorithm, or for adjustements to such algorithm based upon the color space of the original image. Therefore, claims 5 and 20 should also be allowed along with claims 1 and 16.

It is believed that these changes now make the claims clear and definite and, if there were any problems with these changes, Applicants' attorney would appreciate a telephone call.

In view of the foregoing, it is believed that none of the references, taken singly or in combination, disclose the claimed invention. Accordingly, this application is believed to be in condition for allowance, the notice of which is respectfully requested.

Respectfully submitted,

Attorney for Applicant(s)
Registration No. 22,363

Raymond L. Owens/djw
Rochester, NY 14650
Telephone: 585-477-4653
Facsimile: 585-477-4646
If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.